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(FILE 'HOME' ENTERED AT 10:15:03 ON 21 OCT 2004)

FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS, LIFESCI' ENTERED AT 10:22:11 ON 21 OCT 2004

```
L1       1246890 S KINASE?
L2         20803 S HUMAN (3W) L1
L3       6753851 S CLON? OR EXPRESS? OR RECOMBINANT
L4         10046 S L2 AND L3
L5       3623773 S BRAIN OR LYMPH(A)NODE OR BONE (A)MARROW
L6       3016530 S SPLEEN OR LIVER OR PLACENTA
L7          1514 S L4 AND L5
L8          1119 S L4 AND L6
L9       1000152 S PROSTATE OR TESTIS OR THYROID
L10          693 S L4 AND L9
L11         2561 S L7 OR L8 OR L10
L12       360103 S SERINE OR THOREONINE
L13          449 S L11 AND L12
L14          364 S L13 AND THREONINE
L15         3224 S "NHP"
L16            5 S L14 AND L15
L17            5 DUP REM L16 (0 DUPLICATES REMOVED)
                 E FRIDDLE C J/AU
L18          160 S E3-E6
                 E HILBUM E/AU
                 E HILBUN E/AU
L19           62 S E3-E4
                 E NEPOMNICHY B/AU
L20           42 S E3-E4
                 E HU Y/AU
L21         3607 S E3
L22         3797 S L18 OR L19 OR L20 OR L21
L23           77 S L4 AND L22
L24           20 DUP REM L23 (57 DUPLICATES REMOVED)
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 NEWS  3  Jul 12   BEILSTEIN enhanced with new display and select options,
                   resulting in a closer connection to BABS
 NEWS  4  AUG 02   IFIPAT/IFIUDB/IFICDB reloaded with new search and display
                   fields
 NEWS  5  AUG 02   CAplus and CA patent records enhanced with European and Japan
                   Patent Office Classifications
 NEWS  6  AUG 02   The Analysis Edition of STN Express with Discover!
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 NEWS  7  AUG 27   BIOCOMMERCE: Changes and enhancements to content coverage
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                   status data from INPADOC
 NEWS  9  SEP 01   INPADOC: New family current-awareness alert (SDI) available
 NEWS 10  SEP 01   New pricing for the Save Answers for SciFinder Wizard within
                   STN Express with Discover!
 NEWS 11  SEP 01   New display format, HITSTR, available in WPIDS/WPINDEX/WPIX
 NEWS 12  SEP 27   STANDARDS will no longer be available on STN
 NEWS 13  SEP 27   SWETSCAN will no longer be available on STN

 NEWS EXPRESS  JULY 30 CURRENT WINDOWS VERSION IS V7.01, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004
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=> file medline embase biosis biotechds scisearch hcaplus ntis lifesci
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
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FILE 'LIFESCI' ENTERED AT 10:22:11 ON 21 OCT 2004
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=> s kinase?
L1     1246890 KINASE?

=> s human (3w) l1
L2       20803 HUMAN (3W) L1

=> s clon? or express? or recombinant
   5 FILES SEARCHED...
L3     6753851 CLON? OR EXPRESS? OR RECOMBINANT

=> s l2 and l3
L4       10046 L2 AND L3

=> s brain or lymph(a)node or bone (a)marrow
L5     3623773 BRAIN OR LYMPH(A) NODE OR BONE (A) MARROW

=> s spleen or liver or placenta
L6     3016530 SPLEEN OR LIVER OR PLACENTA

=> s l4 and l5
L7        1514 L4 AND L5

=> s l4 and l6
L8        1119 L4 AND L6

=> s prostate or testis or thyroid
L9     1000152 PROSTATE OR TESTIS OR THYROID

=> s l4 and l9
L10        693 L4 AND L9

=> s l7 or l8 or l10
L11       2561 L7 OR L8 OR L10

=> s serine or thoreonine
L12     360103 SERINE OR THOREONINE
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=> s serine or threonine
COMMAND INTERRUPTED
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Desk by telephone or via SEND in the STNMAIL file.

=> s l11 and l12
L13         449 L11 AND L12

=> s l13 and threonine
L14         364 L13 AND THREONINE

=> s "NHP"
L15        3224 "NHP"

=> s l14 and l15
L16           5 L14 AND L15

=> dup rem l16
PROCESSING COMPLETED FOR L16
L17           5 DUP REM L16 (0 DUPLICATES REMOVED)

=> d 1-5 ibib ab

L17   ANSWER 1 OF 5  BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2003-00776  BIOTECHDS
TITLE:            Novel polynucleotides encoding human proteins that are
                  structurally related to animal kinases, useful for drug
                  screening, diagnosis and in gene therapy of biological
                  disorders;
                     vector-mediated recombinant protein gene
                     transfer and expression in host cell for use in
                     drug screening and nootropic disease and mental disorder
                     diagnosis and gene therapy
AUTHOR:           TURNER C A; MATHUR B; FRIDDLE C J
PATENT ASSIGNEE:  LEXICON GENETICS INC
PATENT INFO:      WO 2002048333 20 Jun 2002
APPLICATION INFO: WO 2001-US49068 12 Dec 2001
PRIORITY INFO:    US 2001-289422 8 May 2001; US 2000-255103 12 Dec 2000
DOCUMENT TYPE:    Patent
LANGUAGE:         English
OTHER SOURCE:     WPI: 2002-583505 [62]
AB    DERWENT ABSTRACT:
      NOVELTY - Isolated nucleic acid molecule (I) comprising a nucleotide
      sequence encoding a novel human protein (NHP) of 870, 864, 764,
      751, 654, 648, 548, 535, 895, 889, 789, 776, 982, 976, 876, 863, 957,
      951, 851 or 838 amino acids given in specification, that share structural
      similarity with animal kinases, including serine-
      threonine kinases, casein kinases, calcium/calmodulin-dependent
      protein kinases and mitogen activated kinases, is new.
           DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for an
      isolated nucleic acid molecule comprising a nucleotide sequence that
      encodes the sequence of 870 amino acids and hybridizes under stringent
      conditions to the nucleotide sequence of 2613 base pairs given in the
      specification or its complement.
           WIDER DISCLOSURE - Disclosed are: (1) novel human membrane proteins
      (NHPs) encoded by (I), that share structural similarity with
      mammalian ion channel proteins and particularly voltage-gated potassium
      channel proteins; (2) host cell expressing systems comprising
      (I); (3) antibodies to NHP and anti-idiotypic antibodies; (4)
      fusion proteins comprising NHP; (5) genetically engineered
      animals that either lack or over express (I); (6) antagonists
      and agonists of NHP; (7) compounds that modulate the
      expression or activity NHP; (8) identifying compounds
```

that modulate, **expression** and/or activity of **NHP**; (9) degenerate nucleic acid variants of (I); (10) vectors that contain (I); and (11) nucleotide sequences (e.g. antisense and ribozyme molecules) that inhibit **expression** of (I).

BIOTECHNOLOGY - Preferred Protein: **NHPs** are novel proteins **expressed** in human cell lines and human fetal **brain**, **brain**, pituitary, cerebellum, and fetal lung, kidney, and embryo cells.

ACTIVITY - Nootropic.

MECHANISM OF ACTION - Gene therapy. No suitable data is given.

USE - **NHP** oligonucleotides are useful as hybridization probes for screening libraries and assessing gene **expression** patterns. **NHP** sequences are useful to identify mutations associated with a particular disease and also as a diagnostic or prognostic assay, and also in the molecular mutagenesis/evolution of proteins that are at least partially encoded by the **NHP** sequences. Sequences derived from regions adjacent to the intron/exon boundaries of **NHP** gene can be used to design primers for use in amplification assays to detect mutations within the exons, splice sites, introns that can be used in diagnostics and pharmacogenomics. **NHP** sequences are utilized in microarrays or other assay formats, to screen collections of genetic material from patients who have a particular medical condition. **NHP** nucleotide sequences are useful for drug screening effective in the treatment of symptomatic or phenotypic manifestations of perturbing the normal function of **NHP** in the body, and nucleotide constructs encoding **NHP** products are used to genetically engineer host cells to **express NHP** products in vivo. These genetically engineered cells function as bioreactors in the body delivering a continuous supply of a **NHP** , a **NHP** peptide, or a **NHP** fusion protein to the body. Nucleotide construct encoding **NHP** products are also useful in gene therapy for modulating **NHP expression** and to produce genetically engineered host cells to **express** **NHP** products in vivo. **NHP** nucleotide sequences may also be used as part of ribozyme and/or triple helix sequences that are useful for **NHP** gene regulation. The encoded **NHP** polypeptides are useful for generating antibodies, as reagents in diagnostic assays, for identifying other cellular gene products related to **NHP** and as reagents in assays for screening for compounds that are useful in the treatment of mental, biological or medical disorders and diseases.

EXAMPLE - No suitable example given.(93 pages)

L17 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2002:293825 HCAPLUS
DOCUMENT NUMBER: 136:321268
TITLE: Protein and cDNA sequences of **human** **kinase** sequence homologs
INVENTOR(S): Turner, C. Alexander, Jr.; Mathur, Brian
PATENT ASSIGNEE(S): Lexicon Genetics Incorporated, USA
SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002031129	A2	20020418	WO 2001-US32010	20011011
WO 2002031129	A3	20030206		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,

PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002013183	A5	20020422	AU 2002-13183	20011011
US 2002128458	A1	20020912	US 2001-975326	20011011
US 6476210	B2	20021105		
US 2003023063	A1	20030130	US 2002-217357	20020809
US 6610537	B2	20030826		
US 2003207319	A1	20031106	US 2003-462887	20030617
PRIORITY APPLN. INFO.:			US 2000-239821P	P 20001012
			US 2001-975326	A1 20011011
			WO 2001-US32010	W 20011011
			US 2002-217357	A3 20020809

AB This invention provides protein and cDNA sequences for newly identified human proteins, designated **NHPs**, which shares substantial sequence homol. with animal kinases, especially **serine-threonine** kinases, calcium/calmodulin-dependent protein kinase, and mitogen activated kinases. **NHP** gene **expressed** in, inter alia, human cell lines, human fetal and adult **brain**, pituitary, spinal cord, **testis**, adipose, and esophagus cells. In one embodiment, the invention relates to diagnostic assays for detecting diseases associated with inappropriate **NHP** activity or levels. Also disclosed are methods for utilizing **NHP** in drug screening assays and in therapy directed against diseases associated with inappropriate **NHP** activity or levels.

L17 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:172058 HCAPLUS
DOCUMENT NUMBER: 136:227966
TITLE: Protein and cDNA sequences of **human** protein **kinase** sequence homologs and uses thereof in diagnosis, therapy and drug screening
INVENTOR(S): Friddle, Carl Johan; Hilbun, Erin; Nepomnichy, Boris; Hu, Yi
PATENT ASSIGNEE(S): Lexicon Genetics Incorporated, USA
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002018555	A2	20020307	WO 2001-US26776	20010828
WO 2002018555	A3	20030227		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,
UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2001085326	A5	20020313	AU 2001-85326	20010828
US 2002147320	A1	20021010	US 2001-940921	20010828
PRIORITY APPLN. INFO.:			US 2000-229280P	P 20000831
			WO 2001-US26776	W 20010828

AB This invention provides protein and cDNA sequences for newly identified human proteins, designated **NHPs**, which shares substantial sequence homol. with animal kinases, and particularly NIMA (never in

mitosis A) related kinases, **serine/threonine** kinases, calcium/calmodulin-dependent kinases, and myosin light chain kinases. While **NHP** shares sequence homol. with other protein kinases, its primary sequence is unique. **Expression** of **NHPs** can be detected in, inter alia, human cell lines, and human fetal and adult **brain**, pituitary, cerebellum, spinal cord, thymus, **spleen**, **lymph node**, **bone marrow**, trachea, lung, kidney, fetal and adult **liver**, **prostate**, **testis**, **thyroid**, small intestine, heart, uterus, **placenta**, mammary gland, adipose, esophagus, cervix, rectum, fetal kidney, and fetal lung (SEQID NOS:2 and 4), or human pituitary, kidney, **thyroid**, skeletal muscle, and heart cells (SEQ ID NOS: 7 and 9). The described sequences were compiled from sequences available in GENBANK, and cDNAs generated from kidney, **testis**, trachea, esophagus, pituitary, human gene trapped products (SEQ ID NOS: 2 and 4), or **bone marrow** and skeletal muscle mRNAs. In one embodiment, the invention relates to diagnostic assays for detecting diseases associated with inappropriate **NHP** activity or levels. Also disclosed are methods for utilizing **NHP** in drug screening assays and in therapy directed against diseases associated with inappropriate **NHP** activity or levels.

L17 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:	2001:618177 HCAPLUS
DOCUMENT NUMBER:	135:191337
TITLE:	Protein and cDNA sequences of novel **human kinase** homologs and uses thereof in diagnosis, therapy and drug screening
INVENTOR(S):	Walke, D. Wade; Hu, Yi; Nepomnichy, Boris; Turner, C. Alexander, Jr.; Zambrowicz, Brian
PATENT ASSIGNEE(S):	Lexicon Genetics Incorporated, USA
SOURCE:	PCT Int. Appl., 70 pp. CODEN: PIXXD2
DOCUMENT TYPE:	Patent
LANGUAGE:	English
FAMILY ACC. NUM. COUNT:	1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2001061016	A2	20010823	WO 2001-US5356		20010215
WO 2001061016	A3	20020207			
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
US 2002038011	A1	20020328	US 2001-783320		20010215
EP 1257652	A2	20021120	EP 2001-912839		20010215
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
JP 2003531577	T2	20031028	JP 2001-559853		20010215
PRIORITY APPLN. INFO.:			US 2000-183582P	P	20000218
			US 2000-184014P	P	20000222
			WO 2001-US5356	W	20010215

AB This invention provides protein and cDNA sequences for newly identified human proteins, designated **NHPs**, which shares structural similarity with animal kinases, including cell division control protein kinases, **serine/threonine** protein kinases and membrane-associated guanylate kinases (MAGUKs). The **NHPs** are novel

proteins that are **expressed** in, inter alia, human cell lines and human fetal and adult **brain**, pituitary, cerebellum, thymus, **spleen**, **lymph node**, **bone marrow**, trachea, fetal and adult **liver**, **prostate**, **testis**, **thyroid**, adrenal gland, pancreas, salivary gland, stomach, small intestine, colon, uterus, **placenta**, mammary gland, adipose, esophagus, bladder, cervix, rectum, pericardium, hypothalamus, ovary, fetal and adult kidney, and fetal lung cells. In one embodiment, the invention relates to diagnostic assays for detecting diseases associated with inappropriate **NHP** activity or levels. Also disclosed are methods for utilizing **NHP** in drug screening assays and in therapy directed against diseases associated with inappropriate **NHP** activity or levels.

L17 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:247510 HCAPLUS
DOCUMENT NUMBER: 134:261891
TITLE: Protein and cDNA sequences of **human** **serine/threonine** protein **kinase** and uses thereof in diagnosis, therapy and drug screening
INVENTOR(S): Donoho, Gregory; Turner, C. Alexander, Jr.; Nehls, Michael; Friedrich, Glenn; Zambrowicz, Brian; Sands, Arthur T.
PATENT ASSIGNEE(S): Lexicon Genetics Incorporated, USA
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2001023579	A1	20010405	WO 2000-US26621		20000927
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
EP 1220927	A1	20020710	EP 2000-966996		20000927
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JP 2003510082	T2	20030318	JP 2001-526961		20000927
US 6716616	B1	20040406	US 2000-671050		20000927
PRIORITY APPLN. INFO.:			US 1999-156511P	P	19990928
			WO 2000-US26621	W	20000927

AB This invention provides protein and cDNA sequences for newly identified human proteins, designated **NHPs**, which shares substantial sequence homol. with animal kinases, and more particular **serine/threonine** protein kinases. While **NHP** shares sequence homol. with other **serine/threonine** protein kinases, its primary sequence is unique. Its **expression** is detected in various human tissues including **brain**, pituitary, spinal cord, **spleen**, trachea, kidney, **prostate**, **testis**, adrenal gland cells, and gene trapped human cells. In one embodiment, the invention relates to diagnostic assays for detecting diseases associated with inappropriate **NHP** activity or levels. Also disclosed are methods for utilizing **NHP** in drug screening assays and in therapy directed against diseases associated with inappropriate **NHP**

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     activity or levels.
REFERENCE COUNT:          3     THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
                                RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT


=> e friddle c j/au
E1            1     FRIDDIE S B/AU
E2           25     FRIDDLE C/AU
E3           50 --> FRIDDLE C J/AU
E4           11     FRIDDLE CARL/AU
E5           57     FRIDDLE CARL J/AU
E6           42     FRIDDLE CARL JOHAN/AU
E7            2     FRIDDLE F E/AU
E8            2     FRIDDLE H/AU
E9            1     FRIDDLE J/AU
E10           2     FRIDDLE J D/AU
E11           1     FRIDDLE JOHN D/AU
E12           1     FRIDDLE JR W D/AU

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L18         160 ("FRIDDLE C J"/AU OR "FRIDDLE CARL"/AU OR "FRIDDLE CARL J"/AU
                OR "FRIDDLE CARL JOHAN"/AU)

=> e hilbum e/au
E1            1     HILBSCHER ULRICH/AU
E2            1     HILBUG SEBASTIAN/AU
E3            0 --> HILBUM E/AU
E4            1     HILBUN B/AU
E5           12     HILBUN B M/AU
E6           24     HILBUN E/AU
E7           38     HILBUN ERIN/AU
E8            5     HILBUN G R/AU
E9            5     HILBUN L R/AU
E10           6     HILBUN LAYLA R/AU
E11           2     HILBUN N/AU
E12           1     HILBUN S/AU

=> e hilbun e/au
E1            1     HILBUN B/AU
E2           12     HILBUN B M/AU
E3           24 --> HILBUN E/AU
E4           38     HILBUN ERIN/AU
E5            5     HILBUN G R/AU
E6            5     HILBUN L R/AU
E7            6     HILBUN LAYLA R/AU
E8            2     HILBUN N/AU
E9            1     HILBUN S/AU
E10           3     HILBUN W B/AU
E11           2     HILBUN W M/AU
E12           1     HILBUN WILLIAM MARVIN/AU

=> s e3-e4
L19          62 ("HILBUN E"/AU OR "HILBUN ERIN"/AU)

=> e nepomnichy b/au
E1            1     NEPOMNIASHIKH G I/AU
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E3           20 --> NEPOMNICHY B/AU
E4           22     NEPOMNICHY BORIS/AU
E5            2     NEPOMNIK G B/AU
E6           36     NEPOMNINA V V/AU
E7            1     NEPOMNJASCHAJA E V/AU
E8            1     NEPOMNJASHCHAJA A S/AU
E9            1     NEPOMNJASHCHIKH L M/AU
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E10           1      NEPOMNJASTIJ V P/AU
E11           1      NEPOMNVASHAVA E/AU
E12           1      NEPOMNVASHCHIKH G I/AU

=> s e3-e4
L20          42 ("NEPOMNICHY B"/AU OR "NEPOMNICHY BORIS"/AU)

=> e hu y/au
E1            8      HU XUZHOU/AU
E2            2      HU XY/AU
E3         3607 --> HU Y/AU
E4           25      HU Y A/AU
E5           59      HU Y B/AU
E6          310      HU Y C/AU
E7           92      HU Y D/AU
E8           15      HU Y E/AU
E9          579      HU Y F/AU
E10          79      HU Y G/AU
E11         767      HU Y H/AU
E12           1      HU Y H A/AU

=> s e3
L21        3607 "HU Y"/AU

=> d his

     (FILE 'HOME' ENTERED AT 10:15:03 ON 21 OCT 2004)

     FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS,
     LIFESCI' ENTERED AT 10:22:11 ON 21 OCT 2004
L1       1246890 S KINASE?
L2         20803 S HUMAN (3W) L1
L3       6753851 S CLON? OR EXPRESS? OR RECOMBINANT
L4         10046 S L2 AND L3
L5       3623773 S BRAIN OR LYMPH(A)NODE OR BONE (A)MARROW
L6       3016530 S SPLEEN OR LIVER OR PLACENTA
L7          1514 S L4 AND L5
L8          1119 S L4 AND L6
L9       1000152 S PROSTATE OR TESTIS OR THYROID
L10          693 S L4 AND L9
L11         2561 S L7 OR L8 OR L10
L12       360103 S SERINE OR THOREONINE
L13          449 S L11 AND L12
L14          364 S L13 AND THREONINE
L15         3224 S "NHP"
L16            5 S L14 AND L15
L17            5 DUP REM L16 (0 DUPLICATES REMOVED)
                 E FRIDDLE C J/AU
L18          160 S E3-E6
                 E HILBUM E/AU
                 E HILBUN E/AU
L19           62 S E3-E4
                 E NEPOMNICHY B/AU
L20           42 S E3-E4
                 E HU Y/AU
L21         3607 S E3

=> s l18 or l19 or l20 or l21
L22        3797 L18 OR L19 OR L20 OR L21

=> s l4 and l22
L23          77 L4 AND L22

=> dup rem l23
```

PROCESSING COMPLETED FOR L23
L24 20 DUP REM L23 (57 DUPLICATES REMOVED)

=> d 1-20 ibib ab

L24 ANSWER 1 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:739850 HCAPLUS
DOCUMENT NUMBER: 141:238817
TITLE: Protein and cDNA sequences of a novel **human** protein **kinase**
INVENTOR(S): Walke, D. Wade; Scoville, John; **Friddle, Carl Johan**
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 17 pp., Division of U. S. Ser. No. 196,927.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004175749	A1	20040909	US 2004-803278		20040318
US 6797510	B1	20040928	US 2002-196927		20020520
PRIORITY APPLN. INFO.:			US 2001-293248P	P	20010524
			US 2002-196927	A3	20020520

AB Novel human polynucleotide and polypeptide sequences are disclosed that can be used in therapeutic, diagnostic, and pharmacogenomic applications.

L24 ANSWER 2 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:790757 HCAPLUS
DOCUMENT NUMBER: 141:272651
TITLE: Protein and cDNA sequences of a novel **human** protein **kinase** sequence homolog
INVENTOR(S): Walke, D. Wade; Scoville, John; **Friddle, Carl Johan**
PATENT ASSIGNEE(S): Lexicon Genetics Incorporated, USA
SOURCE: U.S., 17 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 6797510	B1	20040928	US 2002-196927		20020520
US 2004175749	A1	20040909	US 2004-803278		20040318
PRIORITY APPLN. INFO.:			US 2001-293248P	P	20010524
			US 2002-196927	A3	20020520

AB The invention provides protein and cDNA sequences of a novel **human** protein **kinase** sequence homolog. Novel human polynucleotide and polypeptide sequences are disclosed that be used in therapeutic, diagnostic, and pharmacogenomic applications.
REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 3 OF 20 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
DUPLICATE 1
ACCESSION NUMBER: 2003-16127 BIOTECHDS
TITLE: New nucleic acid molecule encoding a novel human protein (NHP), useful for identifying compounds as therapeutic agents for treating a wide variety of symptoms associated with

biological disorders or imbalance;
involving vector-mediated gene transfer and **expression** in host cell for use in gene therapy and drug screening

AUTHOR: TURNER C A; MATHUR B; MATHUR D; **FRIDDLE C J**
PATENT ASSIGNEE: LEXICON GENETICS INC
PATENT INFO: US 6511840 28 Jan 2003
APPLICATION INFO: US 2001-883134 15 Jun 2001
PRIORITY INFO: US 2001-883134 15 Jun 2001; US 2000-211572 15 Jun 2000
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2003-391258 [37]

AB DERWENT ABSTRACT:

NOVELTY - An isolated nucleic acid molecule comprising a sequence of 2925 base pairs (bp) (I), encoding a sequence of 974 amino acids (aa), all sequences fully defined in the specification, or hybridizing under stringent conditions with washing in 0.1 x SSC/0.1 x SDS at 68degreesC to (I) or its complement, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following: (1) a **recombinant expression** vector comprising the isolated nucleic acid molecule; and (2) a host cell comprising the **recombinant expression** vector.

WIDER DISCLOSURE - Also disclosed includes: (1) a **human kinase** protein encoded by the nucleic acid molecule; (2) antagonists or agonists of the protein; (3) transgenic animals that **express** a novel human protein (NHP) transgene, or knock-outs; and (4) processes for identifying compounds that modulate the NHP **expression** and/or activity.

ACTIVITY - None given. No biological data given.

MECHANISM OF ACTION - Gene therapy.

USE - The nucleic acid molecule and protein are useful for identifying compounds as therapeutic agents for treating a wide variety of symptoms associated with biological disorders or imbalance. They are also useful for diagnosis, drug screening, clinical trial monitoring, treating physiological disorders or diseases, and in cosmetic or nutriceutical applications. (27 pages)

L24 ANSWER 4 OF 20 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2004-04631 BIOTECHDS
TITLE: New **human kinase** nucleic acid molecules, useful for diagnosis, drug screening, clinical trial monitoring and treating diseases or disorders associated with biological disorders or imbalances;
involving vector-mediated gene transfer and **expression** in host cell for use in gene therapy
AUTHOR: **HU Y**; **NEPOMNICHY B**; GERHARDT B; WALKE D W; **FRIDDLE C J**
PATENT ASSIGNEE: HU Y; NEPOMNICHY B; GERHARDT B; WALKE D W; FRIDDLE C J
PATENT INFO: US 2003175949 18 Sep 2003
APPLICATION INFO: US 2003-430797 6 May 2003
PRIORITY INFO: US 2003-430797 6 May 2003; US 2000-243893 27 Oct 2000
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2003-898545 [82]

AB DERWENT ABSTRACT:

NOVELTY - An isolated nucleic acid molecule comprising a sequence of 2829 (S1) or 927 (S2) bp, fully defined in the specification, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for an isolated nucleic acid **expression** vector comprising a promoter element operatively positioned to **express** a transcript encoding a sequence of 942 or 308 amino acids, fully defined in the specification.

BIOTECHNOLOGY - Preferred Molecule: The nucleic acid molecule encodes a sequence of 942 or 308 amino acids, fully defined in the specification. It hybridizes under stringent conditions to S1 or its

complement.
ACTIVITY - None given.
MECHANISM OF ACTION - Gene therapy.
USE - The nucleic acid molecules are useful for diagnosis, drug screening, clinical trial monitoring and treating diseases or disorders associated with biological disorders or imbalances. (17 pages)

L24 ANSWER 5 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:254176 HCAPLUS
DOCUMENT NUMBER: 138:283310
TITLE: Protein and cDNA sequences of a **human** protein **kinase**
INVENTOR(S): Walke, D. Wade; **Hilbun, Erin**; Donoho, Gregory; Turner, C. Alexander, Jr.
PATENT ASSIGNEE(S): Lexicon Genetics Incorporated, USA
SOURCE: U.S., 11 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6541252	B1	20030401	US 2001-854856	20010514
PRIORITY APPLN. INFO.:			US 2000-206015P P	20000519

AB The invention provides protein and cDNA sequences of a human protein that has structural similarity with animal protein kinases. The invention further relates to the use of protein kinase in therapeutic, diagnostic, and pharmacogenomic applications.
REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L24 ANSWER 6 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2004:101660 HCAPLUS
DOCUMENT NUMBER: 140:123408
TITLE: Wnk1 kinase deficiency lowers blood pressure in mice: A gene-trap screen to identify potential targets for therapeutic intervention
AUTHOR(S): Zambrowicz, Brian P.; Abuin, Alejandro; Ramirez-Solis, Ramiro; Richter, Lizabeth J.; Piggott, James; Beltran del Rio, Hector; Buxton, Eric C.; Edwards, Joel; Finch, Rick A.; **Friddle, Carl J.**; Gupta, Anupma; Hansen, Gwenn; Hu, Yi; Huang, Wenhu; Jaing, Crystal; Key, Billie Wayne, Jr.; Kipp, Peter; Kohlhauff, Buckley; Ma, Zhi-qing; Markesich, Diane; Payne, Robert; Potter, David G.; Qian, Ny; Shaw, Joseph; Schrick, Jeff; Shi, Zheng-zheng; Sparks, Mary Jean; Van Sligtenhorst, Isaac; Vogel, Peter; Walke, Wade; Xu, Nianhua; Zhu, Qichao; Person, Christophe; Sands, Arthur T.
CORPORATE SOURCE: Lexicon Genetics, The Woodlands, TX, 77381, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2003), 100(24), 14109-14114
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The availability of both the mouse and human genome sequences allows for the systematic discovery of human gene function through the use of the mouse as a model system. To accelerate the genetic determination of gene function, a sequence-tagged gene-trap library of >270,000 mouse embryonic stem cell **clones** (GenBank/EMBL/DDBJ accession nos. CG472819-CG671551) was developed representing mutations in .apprx.60% of

mammalian genes. Through the generation and phenotypic anal. of knockout mice from this resource, a functional screen was undertaken to identify genes regulating physiol. parameters such as blood pressure. As part of this screen, mice deficient for the Wnk1 kinase gene were generated and analyzed. Genetic studies in humans have shown that large intronic deletions in WNK1 lead to its overexpression and are responsible for pseudohypoaldosteronism type II, an autosomal dominant disorder characterized by hypertension, increased renal salt reabsorption, and impaired K+ and H+ excretion. Consistent with the human genetic studies, Wnk1 heterozygous mice displayed a significant decrease in blood pressure. Mice homozygous for the Wnk1 mutation died during embryonic development before day 13 of gestation. These results demonstrate that Wnk1 is a regulator of blood pressure critical for development and illustrate the utility of a functional screen driven by a sequence-based mutagenesis approach. [This abstract record is one of fifty records for this document necessitated by the large number of index entries required to fully index the document and publication system constraints.].

L24 ANSWER 7 OF 20 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
DUPLICATE 3
ACCESSION NUMBER: 2003-06803 BIOTECHDS
TITLE: Novel human proteins that shares structural similarity with animal kinases, useful for therapeutic, diagnostic and pharmacogenomic applications;
recombinant enzyme protein production and sense and antisense sequence for use in gene therapy
AUTHOR: YU X; MIRANDA M; **FRIDDLE C J**
PATENT ASSIGNEE: LEXICON GENETICS INC
PATENT INFO: WO 2002081671 17 Oct 2002
APPLICATION INFO: WO 2002-US10787 4 Apr 2002
PRIORITY INFO: US 2001-282031 6 Apr 2001; US 2001-282031 6 Apr 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2003-058539 [05]
AB DERWENT ABSTRACT:
NOVELTY - An isolated novel human protein (NHP) (I) having the kinase activity of a protein (Ia) comprising a 385 residue amino acid sequence (S1), given in the specification, and encoded by a nucleotide sequence that hybridizes to a 1158 nucleotide sequence (S2), given in the specification under highly stringent conditions, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for an isolated nucleic acid molecule (II) comprising S2 or its complement, and encoding S1.

WIDER DISCLOSURE - (1) agonists and antagonists of NHP, or other compounds that modulate the **expression** or activity of the protein; (2) host cell **expression** systems comprising (II); (3) fusion proteins comprising (I) that direct NHP to a target organ and/or facilitate transport across the membrane into the cytosol; (4) antibodies or anti-idiotypic antibodies specific to (I); (5) genetically engineered animals that either lack or overexpress (I); (6) antisense or ribozyme molecules, and open reading frames of regulatory sequence replacement constructs; (7) process for identifying compounds that modulate i.e. act as agonists or antagonists of NHP **expression** and/or NHP activity that use purified preparations of the NHP and/or NHP products, or cells **expressing** the above; and (8) proteins that are functionally equivalent to the NHP products encoded by (II).

ACTIVITY - None given.

MECHANISM OF ACTION - None given.

USE - (I) and (II) are useful for diagnosis, drug screening, clinical trial monitoring, the treatment of diseases and disorders, and cosmetic or nutriceutical applications. (II) is useful for the identification of protein coding sequences, and mapping a unique gene to a particular chromosome. (II) is also useful as an additional DNA marker for restriction fragment length polymorphism (RFLP) analysis and in

forensic biology. (II) is useful in conjunction with the polymerase chain reaction (PCR) to screen libraries, to isolate **clones** and to prepare **cloning** and sequencing templates. (I) or (II) are useful for the detection of mutant NHPs or inappropriately **expressed** NHPs for the diagnosis of disease, and for screening for drugs effective in the treatment of the symptomatic or phenotypic manifestations of perturbing the normal function of NHP in the body. NHP products are useful as therapeutics. NHP products are also useful for the generation of antibodies, as reagents in diagnostic assays, for the identification of other cellular gene products related to NHP, and as reagents in assays for screening compounds that can be used as pharmaceutical reagents useful in the therapeutic treatment of mental, biological or medical disorders and diseases.

EXAMPLE - None given. (39 pages)

L24 ANSWER 8 OF 20 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
DUPLICATE 4
ACCESSION NUMBER: 2003-06802 BIOTECHDS
TITLE: New **human kinase** proteins useful for diagnosis, drug screening, clinical trial monitoring, treatment of disorders and diseases, and cosmetic and nutritional applications;
recombinant enzyme protein production and antagonist and agonist for use in gene therapy
AUTHOR: TURNER C A; MATHUR B; **FRIDDLE C J**
PATENT ASSIGNEE: LEXICON GENETICS INC
PATENT INFO: WO 2002081670 17 Oct 2002
APPLICATION INFO: WO 2002-US10786 4 Apr 2002
PRIORITY INFO: US 2001-282036 6 Apr 2001; US 2001-282036 6 Apr 2001
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2003-058538 [05]
AB DERWENT ABSTRACT:

NOVELTY - An isolated nucleic acid comprising encoding a 778, 762 or 703 residue **human kinase** amino acid sequence, given in the specification (sequences I, II and III respectively), is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for an isolated protein having the kinase activity of (I), (II) or (III), and which is encoded by a 237, 2289 or 2112 base pair sequence, given in the specification.

WIDER DISCLOSURE - (1) agonists and antagonists of the proteins; (2) antibodies against the proteins; and (3) transgenic knock out animals.

ACTIVITY - None given

MECHANISM OF ACTION - None given

USE - The invention is useful for diagnosis, drug screening, clinical trial monitoring, treatment of disorders and diseases, and cosmetic and nutritional applications (disclosed). (24 pages)

L24 ANSWER 9 OF 20 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
DUPLICATE 5
ACCESSION NUMBER: 2003-00776 BIOTECHDS
TITLE: Novel polynucleotides encoding human proteins that are structurally related to animal kinases, useful for drug screening, diagnosis and in gene therapy of biological disorders;
vector-mediated **recombinant** protein gene transfer and **expression** in host cell for use in drug screening and nootropic disease and mental disorder diagnosis and gene therapy
AUTHOR: TURNER C A; MATHUR B; **FRIDDLE C J**
PATENT ASSIGNEE: LEXICON GENETICS INC
PATENT INFO: WO 2002048333 20 Jun 2002
APPLICATION INFO: WO 2001-US49068 12 Dec 2001
PRIORITY INFO: US 2001-289422 8 May 2001; US 2000-255103 12 Dec 2000

DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-583505 [62]
AB DERWENT ABSTRACT:
NOVELTY - Isolated nucleic acid molecule (I) comprising a nucleotide sequence encoding a novel human protein (NHP) of 870, 864, 764, 751, 654, 648, 548, 535, 895, 889, 789, 776, 982, 976, 876, 863, 957, 951, 851 or 838 amino acids given in specification, that share structural similarity with animal kinases, including serine-threonine kinases, casein kinases, calcium/calmodulin-dependent protein kinases and mitogen activated kinases, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for an isolated nucleic acid molecule comprising a nucleotide sequence that encodes the sequence of 870 amino acids and hybridizes under stringent conditions to the nucleotide sequence of 2613 base pairs given in the specification or its complement.

WIDER DISCLOSURE - Disclosed are: (1) novel human membrane proteins (NHPs) encoded by (I), that share structural similarity with mammalian ion channel proteins and particularly voltage-gated potassium channel proteins; (2) host cell **expressing** systems comprising (I); (3) antibodies to NHP and anti-idiotypic antibodies; (4) fusion proteins comprising NHP; (5) genetically engineered animals that either lack or over **express** (I); (6) antagonists and agonists of NHP; (7) compounds that modulate the **expression** or activity NHP; (8) identifying compounds that modulate, **expression** and/or activity of NHP; (9) degenerate nucleic acid variants of (I); (10) vectors that contain (I); and (11) nucleotide sequences (e.g. antisense and ribozyme molecules) that inhibit **expression** of (I).

BIOTECHNOLOGY - Preferred Protein: NHPs are novel proteins **expressed** in human cell lines and human fetal brain, brain, pituitary, cerebellum, and fetal lung, kidney, and embryo cells.

ACTIVITY - Nootropic.

MECHANISM OF ACTION - Gene therapy. No suitable data is given.

USE - NHP oligonucleotides are useful as hybridization probes for screening libraries and assessing gene **expression** patterns. NHP sequences are useful to identify mutations associated with a particular disease and also as a diagnostic or prognostic assay, and also in the molecular mutagenesis/evolution of proteins that are at least partially encoded by the NHP sequences. Sequences derived from regions adjacent to the intron/exon boundaries of NHP gene can be used to design primers for use in amplification assays to detect mutations within the exons, splice sites, introns that can be used in diagnostics and pharmacogenomics. NHP sequences are utilized in microarrays or other assay formats, to screen collections of genetic material from patients who have a particular medical condition. NHP nucleotide sequences are useful for drug screening effective in the treatment of symptomatic or phenotypic manifestations of perturbing the normal function of NHP in the body, and nucleotide constructs encoding NHP products are used to genetically engineer host cells to **express** NHP products in vivo. These genetically engineered cells function as bioreactors in the body delivering a continuous supply of a NHP, a NHP peptide, or a NHP fusion protein to the body. Nucleotide construct encoding NHP products are also useful in gene therapy for modulating NHP **expression** and to produce genetically engineered host cells to **express** NHP products in vivo. NHP nucleotide sequences may also be used as part of ribozyme and/or triple helix sequences that are useful for NHP gene regulation. The encoded NHP polypeptides are useful for generating antibodies, as reagents in diagnostic assays, for identifying other cellular gene products related to NHP and as reagents in assays for screening for compounds that are useful in the treatment of mental, biological or medical disorders and diseases.

EXAMPLE - No suitable example given.(93 pages)

L24 ANSWER 10 OF 20 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN

DUPLICATE 6
ACCESSION NUMBER: 2002-19616 BIOTECHDS
TITLE: Novel nucleic acid molecule encoding a **human kinase**, useful in therapeutic, diagnostic and pharmacogenomic applications, as DNA markers for restriction fragment length polymorphism analysis and in forensic biology ; **recombinant** enzyme protein and agonist and antagonist use in disease therapy and gene therapy
AUTHOR: WALKE D W; MARICAR M; YU X; **FRIDDLE C J**
PATENT ASSIGNEE: LEXICON GENETICS INC
PATENT INFO: WO 2002046428 13 Jun 2002
APPLICATION INFO: WO 2000-US48533 7 Dec 2000
PRIORITY INFO: US 2000-251941 7 Dec 2000
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-527921 [56]
AB DERWENT ABSTRACT:

NOVELTY - An isolated nucleic acid molecule (I) comprising a nucleotide sequence encoding a sequence (S1) of 424 amino acids fully defined in the specification, and hybridizes under stringent conditions to a sequence (S2) of 1275 nucleotides fully defined in the specification, or its complement, is new.

WIDER DISCLOSURE - Also disclosed are: (1) a host cell **expression** system **expressing** (I); (2) a protein encoded by (I); (3) a fusion protein comprising the protein encoded by (I); (4) antibodies or anti-idiotypic antibodies to the protein encoded by (I); (5) a genetically engineered animal that either lacks or overexpresses (I); (6) antagonists or agonists of the protein encoded by (I); (7) a compound that modulates the **expression** or activity of the protein encoded by (I); (8) a pharmaceutical formulation and method for treating biological disorders; (9) a protein that is functionally equivalent to the protein encoded by (I); and (10) a DNA vector that contains the **human kinase** coding sequences and/or their complements.

USE - (I) is useful in therapeutic, diagnostic and pharmacogenomic applications, and for identifying compounds that modulate, i.e., act as agonists or antagonists of the gene **expression** or gene product activity. (I) is useful for the identification of protein coding sequences, for mapping a unique gene to a particular chromosome, as additional DNA markers for restriction fragment length polymorphism (RFLP) analysis and in forensic biology, for screening libraries, isolating **clones**, preparing, **cloning** and sequencing templates, as hybridization probes, in microarrays or other assay formats, to screen collections of genetic material from patients who have a particular medical condition, to identify mutations associated with a particular disease and also as a diagnostic or prognostic assay. (I) is useful for the detection of mutant human proteins, or inappropriately **expressed** proteins for the diagnosis of disease, for screening for drugs effective in the treatment of the symptomatic or phenotypic manifestations of perturbing the normal function of the protein in the body, for generation of antibodies, for identification of other cellular gene products related to the protein, and as reagents in assays for screening for compounds that can be used as pharmaceutical agents in the therapeutic treatment of mental, biological or medical disorders and diseases.

EXAMPLE - None given. (37 pages)

L24 ANSWER 11 OF 20 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
DUPLICATE 7
ACCESSION NUMBER: 2002-20038 BIOTECHDS
TITLE: Novel **human kinase** polynucleotide useful in therapeutic, diagnostic and pharmacogenomic applications; **recombinant** enzyme protein production via

plasmid **expression** in host cell use in disease therapy and gene therapy

AUTHOR: **FRIDDLE C J**; **HILBUN E**; MATHUR B; TURNER C A

PATENT ASSIGNEE: LEXICON GENETICS INC

PATENT INFO: WO 2002042438 30 May 2002

APPLICATION INFO: WO 2000-US43825 20 Nov 2000

PRIORITY INFO: US 2000-252011 20 Nov 2000

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2002-566563 [60]

AB DERWENT ABSTRACT:

NOVELTY - A **human kinase** polynucleotide (I) selected from a polynucleotide comprising a 2079 base pair sequence (S1) that encodes a 692 or 817 amino acid sequence (S2), a polynucleotide that hybridizes to a 2454 base pair sequence (S3) or its complement, and a polynucleotide comprising at least 24 contiguous base pairs from S3, where S1, S2 or S3 is fully defined in the specification, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for an isolated **expression** vector (II) comprising a promoter element operatively positioned to **express** a transcript encoding the 817 amino acid sequence.

WIDER DISCLOSURE - Also disclosed are: (1) a host cell **expression** system **expressing** (I); (2) a protein encoded by (I); (3) a fusion protein comprising the protein encoded by (I); (4) antibodies or anti-idiotypic antibodies to the protein encoded by (I); (5) a genetically engineered animal that either lacks or over **expresses** (I); (6) antagonists or agonists of the protein encoded by (I); (7) a compound that modulates the **expression** or activity of the protein encoded by (I); (8) a pharmaceutical formulation and method for treating biological disorders; and (9) a protein that is functionally equivalent to the protein encoded by (I).

USE - (I) is useful in therapeutic, diagnostic and pharmacogenomic applications, and for identifying compounds that modulate, i.e., act as agonists or antagonists of the gene **expression** or gene product activity. (I) is useful for the identification of protein coding sequences, for mapping a unique gene to a particular chromosome, as additional DNA markers for restriction fragment length polymorphism (RFLP) analysis and in forensic biology, for screening libraries, isolating **clones**, preparing **cloning** and sequencing templates, as hybridization probes, in microarrays or other assay formats, to screen collections of genetic material from patients who have a particular medical condition, to identify mutations associated with a particular disease and also as a diagnostic or prognostic assay. (I) is useful for the detection of mutant human proteins, or inappropriately **expressed** proteins for the diagnosis of disease, for screening for drugs effective in the treatment of the symptomatic or phenotypic manifestations of perturbing the normal function of the protein in the body, for generation of antibodies, for identification of other cellular gene products related to the protein, and as reagents in assays for screening for compounds that can be used as pharmaceutical agents in the therapeutic treatment of mental, biological or medical disorders and diseases.

EXAMPLE - None given. (43 pages)

L24 ANSWER 12 OF 20 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN

ACCESSION NUMBER: 2002-20053 BIOTECHDS

TITLE: Novel **human kinase** polynucleotide encoding a protein that shares structural similarity with animal kinases for therapeutic, diagnostic and pharmacogenomic applications;
vector-mediated **recombinant** protein gene transfer and **expression** in host cell for use in diagnosis, therapy, pharmacogenetics, mapping, forensics,

DNA probe and DNA microarray
AUTHOR: **HU Y**; KIEKE J A; DONOHO G
PATENT ASSIGNEE: LEXICON GENETICS INC
PATENT INFO: WO 2002055685 18 Jul 2002
APPLICATION INFO: WO 2000-US47606 11 Dec 2000
PRIORITY INFO: US 2000-254744 11 Dec 2000
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-566739 [60]
AB DERWENT ABSTRACT:
NOVELTY - A **human kinase** polynucleotide (I) encoding a protein that shares structural similarity with animal kinases, selected from a polynucleotide that encodes a sequence of 1036 amino acids fully defined in the specification,and a polynucleotide that hybridizes under highly stringent conditions to a sequence of 3111 base pairs fully defined in the specification or its complement, is new.

WIDER DISCLOSURE - Disclosed are: (1) a host cell **expression** system **expressing** (I); (2) a protein encoded by (I); (3) a fusion protein comprising the protein encoded by (I); (4) antibodies or anti-idiotypic antibodies that binds specifically to the protein encoded by (I); (5) a genetically engineered animal that either lacks or overexpresses (I); (6) antagonists or agonists of the protein encoded by (I); (7) a compound that modulates the **expression** or activity of the protein encoded by (I); (8) a pharmaceutical formulation and treatment of biological disorders; (9) a protein that is functionally equivalent to the protein encoded by (I); and (10) a deoxyribonucleic acid (DNA) vector that contains the **human kinase** coding sequences and/or their complements.

USE - (I) is useful in therapeutic, diagnostic and pharmacogenomic applications and for identifying compounds that modulate, i.e. act as agonists or antagonists of the gene **expression** or gene product activity. (I) is useful for the identification of protein coding sequences, for mapping a unique gene to a particular chromosome, as additional DNA markers for restriction fragment length polymorphism (RFLP) analysis and in forensic biology, for screening libraries, isolating **clones**, preparing, **cloning** and sequencing templates, as hybridization probes, in microarrays or other assay formats, to screen collections of genetic material from patients who have a particular medical condition, to identify mutations associated with a particular disease and also as a diagnostic or prognostic assay. (I) is useful for the detection of mutant human proteins, or inappropriately **expressed** proteins for the diagnosis of disease, for screening for drugs effective in the treatment of the symptomatic or phenotypic manifestations of perturbing the normal function of the protein in the body, for generation of antibodies, for identification of other cellular gene products related to the protein, and as reagents in assays for screening for compounds that can be used as pharmaceutical agents in the therapeutic treatment of mental, biological or medical disorders and diseases.

EXAMPLE - No suitable example given.(41 pages)

L24 ANSWER 13 OF 20 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2003-12822 BIOTECHDS
TITLE: New novel human polynucleotides encoding proteins sharing sequence similarity with animal kinases, useful for diagnosing or treating disorders;
human **recombinant** protein production and its encoding gene useful for gene therapy and diagnosis
AUTHOR: TURNER C A; MATHUR B; **FRIDDLE C J**
PATENT ASSIGNEE: TURNER C A; MATHUR B; FRIDDLE C J
PATENT INFO: US 2002161213 31 Oct 2002
APPLICATION INFO: US 2001-20079 12 Dec 2001
PRIORITY INFO: US 2001-20079 12 Dec 2001; US 2000-255103 12 Dec 2000
DOCUMENT TYPE: Patent

LANGUAGE: English
OTHER SOURCE: WPI: 2003-288125 [28]
AB DERWENT ABSTRACT:
NOVELTY - An isolated nucleic acid comprising a nucleotide sequence encoding a sequence having 870, 864, 764, 751, 654, 648, 548, 535, 895, 889, 789, 776, 982, 976, 876, 863, 957, 951, 851 or 838 amino acids, is new.

BIOTECHNOLOGY - Preferred Nucleic Acid: The nucleic acid comprises a nucleotide sequence that: (1) encodes the 870- or 757-amino acid sequence; or (2) hybridizes under stringent conditions to the 2613-bp sequence or its complement.

ACTIVITY - None given.

MECHANISM OF ACTION - Gene therapy.

USE - The novel human polynucleotides encoding proteins sharing sequence similarity with animal kinases are useful for diagnosing or treating disorders. (78 pages)

L24 ANSWER 14 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:575249 HCAPLUS
DOCUMENT NUMBER: 137:136141
TITLE: **Human** protein **kinase**, its cDNA and protein sequences, and use thereof
INVENTOR(S): Yu, Xuanchuan; Miranda, Maricar; **Friddle, Carl Johan**
PATENT ASSIGNEE(S): Lexicon Genetics Incorporated, USA
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002059325	A2	20020801	WO 2001-US50497	20011220
WO 2002059325	A3	20030320		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2002123622	A1	20020905	US 2001-28946	20011220
US 6734009	B2	20040511		

PRIORITY APPLN. INFO.: US 2000-258335P P 20001227

AB The invention provides protein and cDNA sequences for two novel **human** protein **kinases** (2054 and 1958 amino acids resp.), which are obtained by searching human genomic sequence database (Reference GenBank AC016922) in conjunction with cDNAs prepared and isolated from human fetal kidney, testis, and lymph node mRNAs. The novel protein kinase have sequence homol. to Kinase serine/threonine protein kinase as well as Citron kinase from a variety of phyla species. The described genes are mapped to chromosome 12 and a C/G polymorphism is reported for both of them (at nucleotide 5218/6065 resp.). Methods for the preparation of **recombinant** proteins, transgenic animals, and related antibodies are also described. Novel human polynucleotide and polypeptide sequences are disclosed that can be used in therapeutic, diagnostic, and pharmacogenomic applications.

L24 ANSWER 15 OF 20 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:172058 HCAPLUS

DOCUMENT NUMBER: 136:227966
TITLE: Protein and cDNA sequences of **human** protein **kinase** sequence homologs and uses thereof in diagnosis, therapy and drug screening
INVENTOR(S): **Friddle, Carl Johan**; **Hilbun, Erin**; **Nepomnichy, Boris**; Hu, Yi
PATENT ASSIGNEE(S): Lexicon Genetics Incorporated, USA
SOURCE: PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002018555	A2	20020307	WO 2001-US26776	20010828
WO 2002018555	A3	20030227		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001085326	A5	20020313	AU 2001-85326	20010828
US 2002147320	A1	20021010	US 2001-940921	20010828
PRIORITY APPLN. INFO.:			US 2000-229280P P	20000831
			WO 2001-US26776 W	20010828

AB This invention provides protein and cDNA sequences for newly identified human proteins, designated NHPs, which shares substantial sequence homol. with animal kinases, and particularly NIMA (never in mitosis A) related kinases, serine/threonine kinases, calcium/calmodulin-dependent kinases, and myosin light chain kinases. While NHP shares sequence homol. with other protein kinases, its primary sequence is unique. **Expression** of NHPs can be detected in, inter alia, human cell lines, and human fetal and adult brain, pituitary, cerebellum, spinal cord, thymus, spleen, lymph node, bone marrow, trachea, lung, kidney, fetal and adult liver, prostate, testis, thyroid, small intestine, heart, uterus, placenta, mammary gland, adipose, esophagus, cervix, rectum, fetal kidney, and fetal lung (SEQID NOS:2 and 4), or human pituitary, kidney, thyroid, skeletal muscle, and heart cells (SEQ ID NOS: 7 and 9). The described sequences were compiled from sequences available in GENBANK, and cDNAs generated from kidney, testis, trachea, esophagus, pituitary, human gene trapped products (SEQ ID NOS: 2 and 4), or bone marrow and skeletal muscle mRNAs. In one embodiment, the invention relates to diagnostic assays for detecting diseases associated with inappropriate NHP activity or levels. Also disclosed are methods for utilizing NHP in drug screening assays and in therapy directed against diseases associated with inappropriate NHP activity or levels.

L24 ANSWER 16 OF 20 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
DUPLICATE 8
ACCESSION NUMBER: 2002-04068 BIOTECHDS
TITLE: New nucleic acid molecules encoding new human proteins, useful in diagnosis, drug screening, clinical trails monitoring, treatment of physiological disorders and cosmetic or nutriceutical applications;
vector-mediated kinase gene transfer and **expression** in host cell, antibody, DNA probe, DNA primer and transgenic animal for disease diagnosis and gene therapy

AUTHOR: **Hu Y**; **Nepomnichy B**; Wang X; Donoho G; Scoville J; Walke D W
PATENT ASSIGNEE: Lexicon-Genetics
LOCATION: The Woodlands, TX, USA.
PATENT INFO: WO 2001081557 1 Nov 2001
APPLICATION INFO: WO 2001-US13149 24 Apr 2001
PRIORITY INFO: US 2000-201227 1 May 2000; US 2000-199499 25 Apr 2000
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2002-034442 [04]

AB A nucleic acid (I) encoding a new **human kinase** (II) with a 1,545 or 1,224 bp DNA sequence fully defined encoding a 514, 407 or 396 amino acid protein sequence fully defined is claimed. Also disclosed as new are: vectors containing (I); host cell containing (I); fusion proteins containing (I); antibodies and anti-idiotype for (I); transgenic animals that lack or overexpress (I); agonist and antagonist of (I); and compounds that modulate the **expression** or activity of (I). (I) gene was isolated by polymerase chain reaction using DNA primers. (I) can be used for diagnosis, drug screening, clinical trail monitoring, physiological disorder therapy and cosmetic or nutriceutical applications. (I) can also be used for gene mapping and as a DNA probe for screening libraries and assessing gene **expression** profiles and for the detection of mutants for disease diagnosis. (I) is also useful in pharmacogenomics. (44pp)

L24 ANSWER 17 OF 20 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
DUPLICATE 9
ACCESSION NUMBER: 2001-15821 BIOTECHDS
TITLE: Isolated nucleic acids encoding novel human proteins useful for the treatment of disease and as probes for testing and detection;
recombinant kinase and encoding sense and antisense DNA for use in therapy and gene therapy and drug screening
AUTHOR: Walke D W; **Hu Y**; **Nepomnichy B**; Turner Jr C A; Zambrowicz B
PATENT ASSIGNEE: Lexicon-Genetics
LOCATION: The Woodlands, TX, USA.
PATENT INFO: WO 2001061016 23 Aug 2001
APPLICATION INFO: WO 2001-US5356 15 Feb 2001
PRIORITY INFO: US 2000-184014 22 Feb 2000
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2001-502793 [55]

AB Isolated nucleic acid molecules (NAMs) encoding new **human** proteins (**kinases**) are claimed. Also claimed are: a NAM (I) having at least 24 contiguous bases of a 3,108 bp sequence or that hybridizes to this sequence under stringent conditions or that encodes a 1,035 amino acid protein sequence (disclosed); NAM (II) comprising a sequence encoding a 1,214 amino acid protein; a NAM (III) having a sequence encoding a 1,007 amino acid protein sequence; a NAM (IV) comprising at least 24 contiguous bases of a 1,007 bp sequence or that hybridizes to it under stringent conditions or that encodes a 576 amino acid sequence; a NAM (V) having a sequence encoding a 560 amino acid sequence; and a NAM (VI) comprising a sequence encoding a 520 amino acid protein sequence. The proteins are mammal transporter proteins useful for therapy and as drug targets for drug discovery. Protein and DNA sequences are disclosed. (I) to (VI) can be used in sense or antisense gene therapy and as probes for diagnosis. Transgenic animals, fusion proteins, antibodies, agonists and antagonists are disclosed. (70pp)

L24 ANSWER 18 OF 20 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 2001-14671 BIOTECHDS
TITLE: **Human kinase** protein and polynucleotides

encoding the same;
involving vector-mediated gene transfer for **expression** in host cell, antibody, agonist and antagonist

AUTHOR: Donoho G; **Hilbun E**; Turner Jr C A; Friedrich G; Zambrowicz B; Sands A T
PATENT ASSIGNEE: Lexicon-Genetics
LOCATION: The Woodlands, TX, USA.
PATENT INFO: WO 2001053493 26 Jul 2001
APPLICATION INFO: WO 2001-US2120 18 Jan 2001
PRIORITY INFO: US 2000-176690 18 Jan 2000
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: WPI: 2001-442260 [47]

AB An isolated nucleic acid molecule (I) comprising at least 24 contiguous bases of a 1,269 bp sequence, is claimed. Also claimed re: an isolated nucleic acid molecule (II) comprising a nucleotide sequence that encodes a 422 amino acid sequence or its complement; and an isolated nucleic acid. (I) can be used to screen libraries, isolate **clones** and prepare **cloning** and sequencing templates and as hybridization probes for screening libraries. (II) and (III) are useful as therapeutics. Also disclosed are: novel proteins encoded by (III); agonists and antagonists of the NHPs; processes for identifying compounds that modulate the NHPs; DNA vectors; genetically engineered host cells; and antibodies. (33pp)

L24 ANSWER 19 OF 20 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
ACCESSION NUMBER: 1990:247657 BIOSIS
DOCUMENT NUMBER: PREV199038114245; BR38:114245
TITLE: A SIMPLE METHOD FOR DIRECT **CLONING** COMPLEMENTARY DNA SEQUENCE THAT FLANKS A REGION OF KNOWN SEQUENCE FROM TOTAL RNA BY APPLYING THE INVERSE POLYMERASE CHAIN REACTION.
AUTHOR(S): HUANG S [Reprint author]; **HU Y**; WU C; HOLCENBERG J
CORPORATE SOURCE: DIV HEMATOL/ONCOL, CHILDREN HOSP, LOS ANGELES, CALIF 90054, USA
SOURCE: Nucleic Acids Research, (1990) Vol. 18, No. 7, pp. 1922. CODEN: NARHAD. ISSN: 0305-1048.
DOCUMENT TYPE: Article
FILE SEGMENT: BR
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 23 May 1990
Last Updated on STN: 31 May 1990

L24 ANSWER 20 OF 20 BIOTECHDS COPYRIGHT 2004 THE THOMSON CORP. on STN
ACCESSION NUMBER: 1990-06714 BIOTECHDS
TITLE: A simple method for direct **cloning** cDNA sequence that flanks a region of known sequence from total RNA by applying the inverse polymerase chain reaction;
flanking sequence gene **cloning** method
AUTHOR: Huang S H; **Hu Y**; Wu C; Holcenberg J
LOCATION: Division of Hematology/Oncology, Children's Hospital of Los Angeles, Los Angeles, CA 90054, USA.
SOURCE: Nucleic Acids Res.; (1990) 18, 7, 1922
CODEN: NARHAD
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The inverse polymerase chain reaction (IPCR) has been successfully used in the amplification of genomic DNA segments flanking a region of known sequence. A method was developed to extend the IPCR to direct **cloning** of unknown cDNA sequences from total RNA. The method was used to **clone** the 5' and 3'-regions of low-abundance

human deoxycytidine-**kinase** (EC-2.7.1.74) mRNA.
Double-stranded cDNA was synthesized from total cellular RNA of human CCRF/CEM and CCRF/CEM/dC kinase-negative cells. The cDNA was ligated from end to end using phage T4 DNA-ligase. Circularized cDNA was then amplified with gene-specific DNA primers and Taq DNA-polymerase (EC-2.7.7.7). The fragment obtained was confirmed by the size and DNA blotting. An expected segment (120 bp) was amplified in the second polymerase chain reaction with an internal primer and the 5'-primer. This method is useful for **cloning** of full-length cDNA when only a short peptide or cDNA sequence is known. (7 ref)

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=> d his

     (FILE 'HOME' ENTERED AT 10:15:03 ON 21 OCT 2004)

     FILE 'MEDLINE, EMBASE, BIOSIS, BIOTECHDS, SCISEARCH, HCAPLUS, NTIS,
     LIFESCI' ENTERED AT 10:22:11 ON 21 OCT 2004
L1      1246890 S KINASE?
L2        20803 S HUMAN (3W) L1
L3      6753851 S CLON? OR EXPRESS? OR RECOMBINANT
L4        10046 S L2 AND L3
L5      3623773 S BRAIN OR LYMPH(A)NODE OR BONE (A)MARROW
L6      3016530 S SPLEEN OR LIVER OR PLACENTA
L7         1514 S L4 AND L5
L8         1119 S L4 AND L6
L9      1000152 S PROSTATE OR TESTIS OR THYROID
L10         693 S L4 AND L9
L11        2561 S L7 OR L8 OR L10
L12      360103 S SERINE OR THOREONINE
L13         449 S L11 AND L12
L14         364 S L13 AND THREONINE
L15        3224 S "NHP"
L16           5 S L14 AND L15
L17           5 DUP REM L16 (0 DUPLICATES REMOVED)
                E FRIDDLE C J/AU
L18         160 S E3-E6
                E HILBUM E/AU
                E HILBUN E/AU
L19          62 S E3-E4
                E NEPOMNICHY B/AU
L20          42 S E3-E4
                E HU Y/AU
L21        3607 S E3
L22        3797 S L18 OR L19 OR L20 OR L21
L23          77 S L4 AND L22
L24          20 DUP REM L23 (57 DUPLICATES REMOVED)
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	Issue Date	Pages	Document ID	Title
1	20041021	1044	US 20040209878 A1	Novel pyrazolopyrimidines as cyclin dependent kinase inhibitors
2	20041014	43	US 20040203127 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
3	20041014	103	US 20040203097 A1	Kinases and phosphatases
4	20040930	64	US 20040192696 A1	Compositions useful as inhibitors of protein kinases
5	20040930	36	US 20040191818 A1	Compositions and methods for diagnosing and treating autoimmune diseases
6	20040923	47	US 20040186115 A1	Compositions useful as inhibitors of protein kinases
7	20040923	25	US 20040185474 A1	Method of diagnosing depression
8	20040916	66	US 20040180338 A1	Mutated eukariotic transalation initiation factor 2 alpha kinase3, eif2ak3, in patients with neonatal insuluin-dependant diabetes and multiple epiphyseal dyslapsia (wolcott-rallison syndrome)
9	20040916	77	US 20040180048 A1	Neuronal and retinal gene expression patterns
10	20040909	20	US 20040176440 A1	2-Benzoylchromone derivatives
11	20040909	33	US 20040175815 A1	Regulation of human p78-like serube/threonine kinase

	Issue Date	Pages	Document ID	Title
12	20040909	85	US 20040175751 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
13	20040902	76	US 20040171149 A1	Modulation of insulin like growth factor I receptor expression
14	20040812	127	US 20040158879 A1	Polynucleotide and polypeptide fat metabolism regulators and uses thereof
15	20040812	87	US 20040156854 A1	Methods for the identification, assessment, and treatment of patients with proteasome inhibition therapy
16	20040812	76	US 20040156826 A1	Treatment of patients with multiple sclerosis based on gene expression changes in central nervous system tissues
17	20040729	365	US 20040146907 A1	Methods and compositions for detecting dysplasia
18	20040722	126	US 20040142864 A1	Crystal structure of PIM-1 kinase
19	20040722	89	US 20040142366 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
20	20040722	85	US 20040142354 A1	Peptides and proteins for early liver development and antibodies thereto
21	20040715	21	US 20040138464 A1	2-Oxadiazolechromone derivatives
22	20040715	67	US 20040137593 A1	Regulation of human serine/threonine protein kinase-like protein

	Issue Date	Pages	Document ID	Title
23	20040715	111	US 20040137499 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
24	20040708	140	US 20040132043 A1	Proteins Associated with cell growth, differentiation, and death
25	20040701	130	US 20040127406 A1	Methods for in vitro expansion and transdifferentiation of human pancreatic acinar cells into insulin-producing cells
26	20040701	320	US 20040126861 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
27	20040701	195	US 20040126784 A1	Modulators of cellular proliferation
28	20040624	483	US 20040121396 A1	Novel genes encoding proteins having prognostic, diagnostic, preventive, therapeutic, and other uses
29	20040617		US 20040116442 A1	Novel pyrazolopyrimidines as cyclin dependent kinase inhibitors
30	20040617		US 20040115714 A1	Gene BRCC-2 and diagnostic and therapeutic uses thereof
31	20040617		US 20040115645 A1	Modulation of DRAK2 expression
32	20040610		US 20040110177 A1	Method for identifying functional nucleic acids
33	20040603		US 20040106624 A1	Novel pyrazolopyrimidines as cyclin dependent kinase inhibitors

	Issue Date	Pages	Document ID	Title
34	20040603		US 20040106615 A1	Protein kinase inhibitors and uses thereof
35	20040603		US 20040106571 A1	Gene BRCC-3 and diagnostic and therapeutic uses thereof
36	20040527		US 20040102452 A1	Novel pyrazolopyrimidines as cyclin dependent kinase inhibitors
37	20040527		US 20040102451 A1	Novel pyrazolopyrimidines as cyclin dependent kinase inhibitors
38	20040527		US 20040101874 A1	Targets for therapeutic intervention identified in the mitochondrial proteome
39	20040527	56	US 20040101857 A1	Modulation of cytokine-inducible kinase expression
40	20040527	35	US 20040101529 A1	REGULATION OF HUMAN SERINE-THREONINE PROTEIN KINASE
41	20040520		US 20040097517 A1	Novel imidazopyridines as cyclin dependent kinase inhibitors
42	20040520		US 20040097516 A1	Novel pyrazolopyridines as cyclin dependent kinase inhibitors
43	20040520		US 20040097444 A1	Modulation of serine/threonine kinase 16 expression
44	20040520	61	US 20040097409 A1	Compositions and methods for inhibiting human immunodeficiency virus infection by down-regulating human cellular genes
45	20040513		US 20040092535 A1	Benzimidazole quinolinones and uses thereof

	Issue Date	Pages	Document ID	Title
46	20040513	78	US 20040092469 A1	Androgen-regulated PMEPA1 gene and polypeptides
47	20040513	207	US 20040091993 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
48	20040513	42	US 20040091992 A1	PAK4 - related antibodies
49	20040513	279	US 20040091969 A1	Novel compounds
50	20040506		US 20040088746 A1	Apoptosis-inducing dna sequences
51	20040506		US 20040086875 A1	Novel proteins and nucleic acids encoding same
52	20040429		US 20040082627 A1	Certain aromatic monocycles as kinase modulators
53	20040429		US 20040081652 A1	Neuronal and optic nerve gene expression patterns
54	20040422		US 20040077049 A1	Regulation of human wee1-like serine/threonine protein kinase
55	20040422		US 20040077020 A1	Diagnostic microarray for inflammatory bowel disease, crohn's disease and ulcerative colitis

	Issue Date	Pages	Document ID	Title
56	20040422	253	US 20040076955 A1	Methods of diagnosis of bladder cancer, compositions and methods of screening for modulators of bladder cancer
57	20040415		US 20040072835 A1	Novel imidazopyrazines as cyclin dependent kinase inhibitors
58	20040415		US 20040072278 A1	Microfluidic particle-analysis systems
59	20040415	337	US 20040072160 A1	Molecular toxicology modeling
60	20040408		US 20040068380 A1	Human gtp-rho binding protein 2
61	20040408		US 20040067951 A1	6-aryl-imidazo[1,2-a] pyrazin-8-ylamines, method of making, and method of use thereof
62	20040408	53	US 20040067568 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
63	20040401		US 20040063715 A1	Novel imidazopyrazines as cyclin dependent kinase inhibitors
64	20040318		US 20040053927 A1	Certain amino-substituted monocycles as kinase modulators
65	20040318	209	US 20040053317 A1	Gene segregation and biological sample classification methods
66	20040318	287	US 20040053245 A1	Novel nucleic acids and polypeptides
67	20040311		US 20040048374 A1	Mammalian immortalized liver cell

	Issue Date	Pages	Document ID	Title
68	20040311		US 20040048349 A1	Human orthologues of Wart
69	20040311	152	US 20040048310 A1	Novel human protein kinases and protein kinase-like enzymes
70	20040311	267	US 20040048249 A1	Novel nucleic acids and secreted polypeptides
71	20040304	397	US 20040043930 A1	Novel proteins and nucleic acids encoding same
72	20040304	184	US 20040043466 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
73	20040304	66	US 20040043375 A1	Regulation of human serine-threonine protein kinase
74	20040226		US 20040038292 A1	Wound healing biomarkers
75	20040226	259	US 20040038207 A1	Gene expression in bladder tumors
76	20040219	324	US 20040033495 A1	Methods of diagnosis of angiogenesis, compositions and methods of screening for angiogenesis modulators
77	20040219		US 20040033493 A1	Proteins and nucleic acids encoding same

	Issue Date	Pages	Document ID	Title
78	20040219		US 20040033215 A1	Method for proliferating a liver cell, a liver cell obtained thereby, and use thereof
79	20040212	24	US 20040030112 A1	Human testis specific serine/threonine kinase 3
80	20040212	277	US 20040029216 A1	Proteins, polynucleotides encoding them and methods of using the same
81	20040212	570	US 20040029114 A1	Methods of diagnosis of breast cancer, compositions and methods of screening for modulators of breast cancer
82	20040205		US 20040024181 A1	Novel human proteins, polynucleotides encoding them and methods of using the same
83	20040205		US 20040023276 A1	LXR-ligand induced genes and proteins
84	20040205	71	US 20040023231 A1	System for identifying and analyzing expression of are-containing genes
85	20040129		US 20040018525 A1	Methods and compositions for the prediction, diagnosis, prognosis, prevention and treatment of malignant neoplasma
86	20040129	84	US 20040018522 A1	Identification of dysregulated genes in patients with multiple sclerosis
87	20040129		US 20040018513 A1	Classification and prognosis prediction of acute lymphoblastic leukemia by gene expression profiling
88	20040129		US 20040018485 A1	Multiplexed analysis of cells

	Issue Date	Pages	Document ID	Title
89	20040122	53	US 20040014659 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
90	20040122		US 20040014059 A1	Method for the detection of gene transcripts in blood and uses thereof
91	20040122		US 20040014040 A1	Cardiotoxin molecular toxicology modeling
92	20040115	73	US 20040010136 A1	Composition for the detection of signaling pathway gene expression
93	20040115		US 20040010119 A1	Novel proteins and nucleic acids encoding same
94	20040115		US 20040009502 A1	Identification and tissue distribution of two novel spliced variants of the mouse LATS2 gene
95	20040115	484	US 20040009479 A1	Methods and compositions for diagnosing or monitoring auto immune and chronic inflammatory diseases
96	20040108		US 20040005624 A1	84573, a human protein kinase family member and uses therefor
97	20040108		US 20040005612 A1	Endometrial genes in endometrial disorders
98	20040108		US 20040005603 A1	Gene shinc-3 and diagnostic and therapeutic uses thereof

	Issue Date	Pages	Document ID	Title
99	20040108		US 20040005563 A1	Methods of diagnosis of ovarian cancer, compositions and methods of screening for modulators of ovarian cancer
100	20040108		US 20040005560 A1	Novel full-length cDNA
101	20040108		US 20040005559 A1	Markers of neuronal differentiation and morphogenesis
102	20040101		US 20040002067 A1	Breast cancer progression signatures
103	20031225		US 20030235820 A1	Novel methods of diagnosis of metastatic colorectal cancer, compositions and methods of screening for modulators of metastatic colorectal cancer
104	20031218		US 20030232773 A1	Antisense modulation of DRAK1 expression
105	20031218	111	US 20030232408 A1	ISOLATED HUMAN KINASE PROTEINS
106	20031218		US 20030232391 A1	Identification of kinase inhibitors
107	20031211	122	US 20030228595 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
108	20031211	206	US 20030228570 A1	Methods of diagnosis of Hepatitis C infection, compositions and methods of screening for modulators of Hepatitis C infection

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109	20031211		US 20030228317 A1	Gene BRCC-1 and diagnostic and therapeutic uses thereof
110	20031204		US 20030225527 A1	Crystals and structures of MST3
111	20031204		US 20030225023 A1	Gene SHINC-2 and diagnostic and therapeutic uses thereof
112	20031204		US 20030224422 A1	Pre-and post therapy gene expression profiling to identify drug targets
113	20031127	176	US 20030219875 A1	Albumin fusion proteins
114	20031127		US 20030219767 A1	Compositions, kits, and methods for identification, assessment, prevention, and therapy of breast cancer
115	20031120		US 20030215803 A1	Human genes and gene expression products isolated from human prostate
116	20031113		US 20030212073 A1	Imidazo[1,2-a]pyrazin-8-ylamines, method of making, and method of use thereof
117	20031113	23	US 20030211563 A1	Human testis specific serine/threonine kinase 1 & 2

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118	20031113		US 20030211476 A1	Genetic analysis of peyer's patches and M cells and methods and compositions targeting peyer's patches and M cell receptors
119	20031113	136	US 20030211093 A1	Human kinases
120	20031106		US 20030208784 A1	Methods of constructing a gene mutation library and compounds and compositions thereof
121	20031106		US 20030207883 A1	Indazole benzimidazole compounds
122	20031106		US 20030207315 A1	Anti-aging nucleic acid and protein targets
123	20031106	128	US 20030207311 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof

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124	20031030		US 20030203847 A1	Methods and compositions in treating pain and painful disorders using 9949, 14230, 760, 62553, 12216, 17719, 41897, 47174, 33408, 10002, 16209, 314, 636, 27410, 33260, 619, 15985, 69112, 2158, 224, 615, 44373, 95431, 22245, 2387, 16658, 55054, 16314, 1613, 1675, 9569 or 13424 molecules
125	20031023		US 20030198975 A1	Proteins associated with cell growth, differentiation, and death
126	20031023		US 20030198972 A1	Grading of breast cancer
127	20031023		US 20030198953 A1	Novel proteins and nucleic acids encoding same
128	20031016		US 20030194764 A1	Compositions and methods for the therapy and diagnosis of lung cancer
129	20031016		US 20030194725 A1	Methods for identifying and validating potential drug targets
130	20031009		US 20030190602 A1	Cell-based detection and differentiation of disease states
131	20030925		US 20030181413 A1	Raf protein kinase therapeutics
132	20030925	520	US 20030180930 A1	Novel human protein kinase, phosphatase, and protease family members and uses thereof

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133	20030925		US 20030180924 A1	Formulation of certain pyrazolo [3,4,-d] pyrimidines as kinase modulators
134	20030918		US 20030176375 A1	Method of treating anemia
135	20030918		US 20030175733 A1	Polypeptides having diagnostic, preventive, therapeutic, and other uses
136	20030911		US 20030171557 A1	Novel serine-threonine kinase gene
137	20030911		US 20030171429 A1	Anti-inflammatory and psoriasis treatment and protein kinase inhibition by hydroxyltilbenes and novel stilbene derivatives and analogues
138	20030911	61	US 20030170713 A1	Method of detecting androgen-regulated gene
139	20030904		US 20030166215 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
140	20030904	17	US 20030166025 A1	Antiproliferative Sgk reagents and methods
141	20030904		US 20030165809 A1	MARKs as modifiers of the p53 pathway and methods of use
142	20030828	57	US 20030162277 A1	Calcium/calmodulin-dependent kinase
143	20030821		US 20030158139 A1	Decreasing adipose mass by altering RSK2 activity

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144	20030821		US 20030157679 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
145	20030821	27	US 20030157526 A1	Identification of genetic markers of biological age and metabolism
146	20030814	278	US 20030154032 A1	Methods and compositions for diagnosing and treating rheumatoid arthritis
147	20030814		US 20030153018 A1	Methods and compositions for treating cancer using 2192, 2193, 6568, 8895, 9138, 9217, 9609, 9857, 9882, 10025, 20657, 21163, 25848, 25968, 32603, 32670, 33794, 54476 and 94710
148	20030814		US 20030152945 A1	Cell cycle progression proteins
149	20030814		US 20030152926 A1	Novel methods of diagnosis of angiogenesis, compositions and methods of screening for angiogenesis modulators
150	20030807		US 20030149997 A1	Diagnostics and therapeutics for arterial wall disruptive disorders
151	20030807		US 20030148974 A1	Antisense modulation of akt-3 expression
152	20030731		US 20030143690 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
153	20030724	142	US 20030138795 A1	Polynucleotide encoding a novel human growth factor with homology to epidermal growth factor, BGS-8, expressed highly in immune tissue

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154	20030724		US 20030138793 A1	Molecular signatures of commonly fatal carcinomas
155	20030724	460	US 20030138432 A1	Selective cellular targeting: multifunctional delivery vehicles, multifunctional prodrugs, use as antineoplastic drugs
156	20030717		US 20030134324 A1	Identifying drugs for and diagnosis of Benign Prostatic Hyperplasia using gene expression profiles
157	20030717		US 20030134283 A1	Genes regulated in dendritic cell differentiation
158	20030717		US 20030134280 A1	Identifying drugs for and diagnosis of benign prostatic hyperplasia using gene expression profiles
159	20030703		US 20030125231 A1	Methods and compounds for the diagnosis of inflammatory disease and identification of pharmacological agents useful in the treatment of inflammatory disease
160	20030703		US 20030124579 A1	Methods of diagnosis of ovarian cancer, compositions and methods of screening for modulators of ovarian cancer
161	20030703		US 20030124128 A1	Compositions, kits, and methods for identification, assessment, prevention, and therapy of breast cancer
162	20030703		US 20030124107 A1	PAK5-related compositions and methods

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163	20030626		US 20030119769 A1	Antisense oligonucleotide modulation of raf gene expression
164	20030626		US 20030119720 A1	Oligopeptide treatment of anthrax
165	20030626		US 20030119037 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
166	20030619		US 20030113733 A1	Gene regulator
167	20030612		US 20030108871 A1	Genes expressed in treated human C3A liver cell cultures
168	20030605		US 20030104615 A1	Immortalized bone marrow mesenchymal stem cell
169	20030605		US 20030104457 A1	Method and device for detecting and monitoring alcoholism and related diseases using microarrays
170	20030605		US 20030104393 A1	Blood assessment of injury
171	20030529		US 20030100477 A1	Medicinal compositions for suppressing beta-amyloid production
172	20030522		US 20030096782 A1	Expression profiling in the intact human heart
173	20030508		US 20030087273 A1	Compositions and methods for inhibiting human immunodeficiency virus infection by down-regulating human cellular genes
174	20030501		US 20030082586 A1	Antibodies having diagnostic, preventive, therapeutic, and other uses
175	20030501	78	US 20030082511 A1	Identification of modulatory molecules using inducible promoters

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176	20030424		US 20030078737 A1	Method and apparatus for increasing the dynamic range and accuracy of binding assays
177	20030424	77	US 20030077697 A1	Novel serine/threonine protein-kinase like proteins and nucleic acids encoding the same
178	20030417		US 20030073143 A1	DIAGNOSIS AND TREATMENT OF ALK-7 RELATED DISORDERS
179	20030417		US 20030073100 A1	Method of identifying renalgenerative agents using differential gene expression
180	20030403		US 20030065157 A1	Genes expressed in lung cancer
181	20030327		US 20030059918 A1	Regulation of human serine/threonine protein kinase
182	20030320		US 20030054387 A1	Metastasis-associated genes
183	20030313		US 20030050230 A1	STE20-RELATED PROTEIN KINASES
184	20030313		US 20030049795 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
185	20030306		US 20030045491 A1	TTK in diagnosis and as a therapeutic target in cancer
186	20030306		US 20030044783 A1	Human genes and gene expression products
187	20030220		US 20030036526 A1	Leptin-mediated gene-induction

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188	20030213		US 20030032607 A1	Antisense oligonucleotide modulation of raf gene expression
189	20030206		US 20030027307 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
190	20030130		US 20030022835 A1	Compositions isolated from skin cells and methods for their use
191	20030130		US 20030022341 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
192	20030130		US 20030022340 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
193	20030130		US 20030022337 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
194	20030130		US 20030022279 A1	Novel genes encoding proteins having prognostic, diagnostic, preventive, therapeutic, and other uses
195	20030130		US 20030022232 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
196	20021226		US 20020198362 A1	Compositions and methods for the detection, diagnosis and therapy of hematological malignancies
197	20021219		US 20020192678 A1	Genes expressed in senescence

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198	20021219		US 20020192204 A1	15985, a novel human serine/threonine protein kinase family member and uses thereof
199	20021121		US 20020173049 A1	Controlling protein levels in eucaryotic organisms
200	20021114		US 20020169303 A1	Novel PTP-20, PCP-2, BDP1, CLK, and SIRP proteins and related products and methods
201	20021114		US 20020169126 A1	Compositions and methods for inactivating the Akt oncogene and/or activating the p38 pro-apoptotic gene
202	20021107		US 20020165188 A1	Methods for inhibition of tumorigenic properties of melanoma cells
203	20021107		US 20020164672 A1	Regulation of JNK activity by modulation of the interaction between the endocytic protein endophilin and the germinal center kinase-like kinase
204	20021031		US 20020160382 A1	Genes expressed in colon cancer
205	20021010		US 20020146843 A1	Controlling protein levels in eucaryotic organisms

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206	20020926		US 20020137077 A1	Genes regulated in activated T cells
207	20020919		US 20020132322 A1	ISOLATED HUMAN KINASE PROTEINS, NUCLEIC ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES THEREOF
208	20020919		US 20020132296 A1	Human Ste20-like stress activated serine/threonine kinase
209	20020912		US 20020127683 A1	ISOLATED HUMAN KINASE PROTEINS, NUCLEIC ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES THEREOF
210	20020905		US 20020123474 A1	Human GTP-Rho binding protein2
211	20020905		US 20020123139 A1	Antibodies which bind specifically to activin receptor like kinases
212	20020829		US 20020119929 A1	Can1 and its role in mammalian infertility
213	20020822		US 20020115090 A1	Expression analysis of KIAA nucleic acids and polypeptides useful in the diagnosis and treatment of prostate cancer
214	20020808		US 20020107215 A1	Tissue-associated proteins and their uses
215	20020808		US 20020106771 A1	Nucleic acids encoding CLK protein kinases

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216	20020801		US 20020102679 A1	Compositions and methods for the therapy and diagnosis of ovarian cancer
217	20020627		US 20020082189 A1	ISOLATED HUMAN SERINE/THREONINE KINASE NUCLEIC ACID MOLECULES ENCODING HUMAN SERINE/THREONINE KINASE AND USES THEREOF
218	20020530		US 20020064843 A1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
219	20020502		US 20020051980 A1	Methods for modulating the activation of a lymphocyte expressed G protein coupled receptor involved in cell proliferation, autoimmunity and inflammation
220	20020328		US 20020037531 A1	Expression cloning of protein targets for phospholipids
221	20020228		US 20020025942 A1	NOVEL TAU/NEUROFILAMENT PROTEIN KINASES
222	20020221		US 20020023280 A1	Expressed sequences of arabidopsis thaliana
223	20020207		US 20020016372 A1	Method for preventing and treating alzheimer's disease and brain damage associated with cardiov ascular disease and head injury
224	20020124		US 20020009797 A1	Growth stimulation of biological cells and tissue by electromagnetic fields and uses thereof
225	20020124		US 20020009730 A1	Human stress array
226	20011213		US 20010051335 A1	POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN TASSEL

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227	20011122		US 20010044104 A1	Genes defferentially expressed in secretory versus proliferative endometrium
228	20011108		US 20010039036 A1	Cloning and recombinant production of receptor(s) of the activin/TGF-beta superfamily
229	20011004	15	US 20010027184 A1	Serine/threonine protein kinase (H-SGK2)
230	20041019		US 6806258 B2	Antisense oligonucleotide modulation of raf gene expression
231	20040928		US 6797513 B2	Nucleic acid encoding CLK2 protein kinases
232	20040831		US 6783969 B1	Cathepsin V-like polypeptides
233	20040706		US 6759223 B2	Calcium/calmodulin-dependent kinase
234	20040622		US 6753314 B1	Protein-protein complexes and methods of using same
235	20040525		US 6740513 B2	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof

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236	20040511		US 6734001 B1	3-phosphoinositide-dependent protein kinase
237	20040323		US 6709830 B2	Methods for modulating the activation of a lymphocyte expressed G protein coupled receptor involved in cell proliferation, autoimmunity and inflammation
238	20040316		US 6706511 B2	Isolated human kinase proteins
239	20040316		US 6706510 B2	Isolated human kinase proteins
240	20040217		US 6692948 B2	Isolated human kinase proteins
241	20040217		US 6692925 B1	Proteins having serine/threonine kinase domains, corresponding nucleic acid molecules, and their use
242	20040217		US 6692744 B2	Betaglycan as an inhibin receptor and uses thereof
243	20040210		US 6689560 B1	Raf protein kinase therapeutics
244	20040203		US 6686176 B2	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof

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245	20040203		US 6686147 B1	Cancer associated antigens and uses therefor
246	20040120		US 6680188 B2	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
247	20040120		US 6680170 B2	Polynucleotides encoding STE20-related protein kinases and methods of use
248	20040113		US 6677437 B1	Serine-threonine kinase gene
249	20040106		US 6673597 B2	Growth stimulation of biological cells and tissue by electromagnetic fields and uses thereof
250	20031223		US 6667168 B1	PAK4, a novel gene encoding a serine/threonine kinase
251	20031202		US 6656716 B1	Polypeptide fragments of human PAK5 protein kinase
252	20031125		US 6653117 B2	Isolated human kinase proteins
253	20031111		US 6645763 B2	Immortalized bone marrow mesenchymal stem cell
254	20031104		US 6642362 B1	Genes coding proteins for early liver development and their use in diagnosing and treating liver disease

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255	20031028		US 6638745 B1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
256	20030902		US 6613506 B1	Compositions and methods for inhibiting human immunodeficiency virus infection by down-regulating human cellular genes
257	20030708		US 6589733 B1	Methods of preparing compositions comprising chemicals capable of transcriptional modulators
258	20030701		US 6586185 B2	Use of polypeptides or nucleic acids for the diagnosis or treatment of skin disorders and wound healing and for the identification of pharmacologically active substances
259	20030617		US 6579691 B1	Protein kinase NPK-110
260	20030527		US 6569624 B1	Identification of genetic markers of biological age and metabolism
261	20030520		US 6566130 B1	Androgen-regulated gene expressed in prostate tissue
262	20030506		US 6559280 B2	Controlling protein levels in eucaryotic organisms
263	20030429		US 6555352 B2	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof

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264	20030429		US 6555328 B1	Screening methods for altering circadian rhythms and for human casein kinase I .delta. and/or .epsilon. phosphorylation of human clock proteins, period 1, -2 and -3
265	20030408		US 6544741 B1	Sequence specific and sequence non-specific methods and materials for cDNA normalization and subtraction
266	20030225		US 6524787 B1	Diagnostics and therapy based on vascular mimicry
267	20030204		US 6514719 B1	Methods for identifying compounds that alter kinase activity
268	20030204		US 6514696 B1	Transcriptionally regulated G protein-coupled receptor G2A
269	20021231		US 6500938 B1	Composition for the detection of signaling pathway gene expression
270	20021231		US 6500656 B1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
271	20021217		US 6495353 B1	Human orthologues of wart

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272	20021210		US 6492156 B1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
273	20021210		US 6492155 B2	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
274	20021126		US 6485963 B1	Growth stimulation of biological cells and tissue by electromagnetic fields and uses thereof
275	20021119		US 6482935 B1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
276	20021119		US 6482623 B1	Lipid kinase
277	20021112		US 6479269 B2	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
278	20021105		US 6476212 B1	Polynucleotides and polypeptides derived from corn ear
279	20020924		US 6455250 B1	Endonuclease compositions and methods of use
280	20020730		US 6426221 B1	Antisense modulation of RIP2 expression

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281	20020709	18	US 6416759 B1	Antiproliferative Sgk reagents and methods
282	20020625		US 6410518 B1	Antisense oligonucleotide inhibition of raf gene expression
283	20020618		US 6406853 B1	Interventions to mimic the effects of calorie restriction
284	20020611		US 6403353 B1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
285	20020521		US 6391636 B1	Antisense oligonucleotide modulation of raf gene expression
286	20020507		US 6383760 B1	Transcriptionally regulated G protein-coupled receptor
287	20020416		US 6372467 B1	P54s6k and p85s6k genes, proteins, primers, probes, and detection methods
288	20020319		US 6358932 B1	Antisense oligonucleotide inhibition of raf gene expression

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289	20020319		US 6358720 B1	Serine/theonine protein kinase
290	20020122		US 6340583 B1	Isolated human kinase proteins, nucleic acid molecules encoding human kinase proteins, and uses thereof
291	20020101		US 6335170 B1	Gene expression in bladder tumors
292	20011218		US 6331621 B1	Isolated nucleic acid molecules which encode activin-receptor like kinases, expression vectors and cells containing these
293	20011218		US 6331396 B1	Arrays for identifying agents which mimic or inhibit the activity of interferons
294	20011127		US 6323318 B1	Human protein kinases hYAK3-2
295	20011113		US 6316217 B1	Activin receptor-like kinases, proteins having serine threonine kinase domains and polynucleotides encoding same
296	20011023		US 6306663 B1	Controlling protein levels in eucaryotic organisms
297	20011016		US 6303358 B1	ERK3 MAP2 protein kinase

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298	20011009		US 6300098 B1	Human signal transduction serine/threonine kinase
299	20011002		US 6297035 B1	ERK1 MAP2 protein kinase
300	20010821		US 6277963 B1	Antibodies directed toward extracellular signal-related kinases
301	20010807		US 6271365 B1	Activin like receptor--Isolated kinase proteins ALK-2, ALK-4, ALK-5, and nucleic acid molecules encoding them
302	20010724		US 6265560 B1	Human Ste20-like stress activated serine/threonine kinase
303	20010724		US 6265194 B1	Serine-threonine kinase gene
304	20010710		US 6258776 B1	Calcium-regulated kinase
305	20010626		US 6251664 B1	Human gene sequence of the down syndrome critical region of human chromosome 21, coding for a serine-threonine protein kinase (MNB), expressed in the neuronal regions affected in down syndrome

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306	20010410		US 6214562 B1	Transcriptionally regualted G protein-coupled receptor
307	20010327		US 6207814 B1	Activin receptor-like kinases, ALK-3 and ALK-6, and nucleic acids encoding them
308	20010213		US 6187586 B1	Antisense modulation of AKT-3 expression
309	20010109		US 6171798 B1	P53-regulated genes
310	20001226		US 6165766 A	Human protein kinases hYAK3
311	20001219		US 6162896 A	Recombinant vertebrate activin receptors
312	20001017		US 6133006 A	YAK-1 related serine/threonine protein kinase-HTLAR33
313	20000725		US 6093560 A	Nucleic acid molecule encoding Ste20 oxidant stress response kinase-1 (SOK-1) polypeptide
314	20000718		US 6090626 A	Antisense oligonucleotide modulation of raf gene expression
315	20000704		US 6083713 A	Cloning and expression of .beta.APP-C100 receptor (C100-R)

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316	20000627		US 6080546 A	Antisense modulation of MEKK5 expression
317	20000314		US 6037136 A	Interactions between RaF proto-oncogenes and CDC25 phosphatases, and uses related thereto
318	20000307		US 6034228 A	Human signal transduction serine/threonine kinase
319	20000307		US 6034212 A	SH3 kinase domain associated protein, a signalling domain therein, nucleic acids encoding the protein and the domain, and diagnostic and therapeutic uses thereof
320	20000208		US 6022740 A	SH3 kinase domain associated protein, a signalling domain therein, nucleic acids encoding the protein and the domain, and diagnostic and therapeutic uses thereof
321	20000201		US 6020135 A	P53-regulated genes
322	20000111		US 6013500 A	PAK4, a novel gene encoding a serine/threonine kinase
323	19991116		US 5985635 A	Nucleic acids encoding novel human serine/threonine protein kinases
324	19991109		US 5981731 A	Antisense oligonucleotide modulation of B-raf gene expression

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325	19991109		US 5981248 A	Mammalian cell death preventing kinase, DPK
326	19991026		US 5972676 A	Diagnosis and treatment of AUR-1 and/or AUR-2 related disorders
327	19991012		US 5965420 A	Human protein kinases hYAK3
328	19991005		US 5962312 A	Diagnosis and treatment of AUR-1 and/or AUR-2 related disorders
329	19991005		US 5962265 A	Human signal transduction serine/threonine kinase
330	19990921		US 5955594 A	Nucleic acids encoding proteins for early liver development
331	19990921		US 5955444 A	Method of inhibiting abnormal tau hyper phosphorylation in a cell
332	19990914		US 5952229 A	Antisense oligonucleotide modulation of raf gene expression
333	19990914		US 5952217 A	Recombinant yeast cell and assay using same

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334	19990810		US 5935783 A	Genes mapping in the digeorge and velocardiofacial syndrome minimal critical region
335	19990706		US 5919773 A	Antisense oligonucleotide modulation of raf gene expression
336	19990622		US 5914261 A	Family of MAP2 protein kinases
337	19990615		US 5912224 A	Methods and compositions for enhancing cellular response to TGF-.beta. ligands
338	19990302		US 5877007 A	Method of screening for protein inhibitors and activators
339	19990216		US 5872006 A	Family of MAP2 protein kinases
340	19981215		US 5849572 A	HSV-1 vector containing a lat promoter
341	19981103		US 5830699 A	SOK-1 and methods of use
342	19981006		US 5817479 A	Human kinase homologs
343	19980707		US 5776751 A	Family of MAP2 protein kinases
344	19980428		US 5744362 A	Antisense oligonucleotide modulation of raf gene expression

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345	19980421		US 5741689 A	Methods to inhibit serine kinase activity and to alter intersubunit binding activity of phosphatidylinositol 3-kinase, and serine kinase active sequence of the same
346	19971118		US 5688655 A	Method of screening for protein inhibitors and activators
347	19970812		US 5656612 A	Antisense oligonucleotide modulation of raf gene expression
348	19970121		US 5595904 A	Family of map2 protein kinases
349	19961008		US 5563255 A	Antisense oligonucleotide modulation of raf gene expression
350	19931130		US 5266464 A	Method of screening for protein inhibitors and activators
351	19901225		US 4980281 A	Method of screening for protein inhibitors and activators

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1	20040812	76	US 20040156826 A1	Treatment of patients with multiple sclerosis based on gene expression changes in central nervous system tissues
2	20040722	85	US 20040142354 A1	Peptides and proteins for early liver development and antibodies thereto
3	20040610	22	US 20040110177 A1	Method for identifying functional nucleic acids
4	20040520	61	US 20040097409 A1	Compositions and methods for inhibiting human immunodeficiency virus infection by down-regulating human cellular genes
5	20040513	279	US 20040091969 A1	Novel compounds
6	20040422	55	US 20040077049 A1	Regulation of human wee1-like serine/threonine protein kinase
7	20040422	253	US 20040076955 A1	Methods of diagnosis of bladder cancer, compositions and methods of screening for modulators of bladder cancer
8	20040415	337	US 20040072160 A1	Molecular toxicology modeling
9	20040226	259	US 20040038207 A1	Gene expression in bladder tumors
10	20040219	324	US 20040033495 A1	Methods of diagnosis of angiogenesis, compositions and methods of screening for angiogenesis modulators

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11	20040212	277	US 20040029216 A1	Proteins, polynucleotides encoding them and methods of using the same
12	20040212	570	US 20040029114 A1	Methods of diagnosis of breast cancer, compositions and methods of screening for modulators of breast cancer
13	20040129	84	US 20040018522 A1	Identification of dysregulated genes in patients with multiple sclerosis
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1	L1	54527	serine or threonine
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6	L6	42151	prostate or testis or thyroid
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